## ON MUTILLIDAE PARASITIC ON GLOSSINA MORSITANS.

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## Mutilla glossinae, Turn.

Mutilla glossinae, Turner, Bull. Entom. Res.; v., 1915, p. 383, ㅇ.
ô. Niger, albo-pilosus; pronoto, mesonoto, scutelloque rufo-ferrugineis; calcaribus albidis ; segmentis dorsalibus $2-4$ apice anguste albo-fimbriatis ; alis basi hyalinis, dimidio apicali modice infuscatis; mandibulis apice tridentatis. Long. 6 mm .
of. Head narrower than the thorax, broader than long, rounded at the posterior angles, closely and not very finely punctured, the antennal tubercles well developed. Clypeus concave, smooth and shining. Third joint of the flagellum equal to the fourth, half as long again as the second and more than twice as long as the first. Eyes ovate, converging towards the clypeus, not emarginate ; ocelli placed in a triangle, the posterior pair a little further from each other than from the anterior ocellus and situated on the inner edge of a large but shallow depression. Thorax broad and short, closely but not coarsely punctured ; anterior margin of the pronotum straight, the posterior margin broadly arcuate ; scutellum flat, broadly truncate at the apex ; pleurae very closely punctured and sparsely clothed with long white pubescence. Median segment very coarsely reticulate, shorter than the scutellum, posterior slope very steep, not distinctly separated from the dorsal surface. Abdomen subsessile; closely punctured, with distinct but narrow apical bands of long white hairs on segments 2-4, a less clearly defined band on the first; apical dorsal segment broadly rounded, more coarsely punctured, the punctures more or less confluent longitudinally. Second ventral segment closely punctured and sparsely clothed with long whitish hairs, which form a continuous band on the apical margin. First dorsal segment short and broad, slightly depressed on the apical margin; second very broad, fully twice as broad as long, the sides convex. Fore-wing with three cubital cells, radial cell very broad, not more than twice as long as broad ; first abscissa of the radius equal to the third, shorter than the second, the two recurrent nervures received near the middle of the second and third cubital cells.

Nyasaland: Monkey Bay (Dr. W. A. Lamborn).
A large series of both sexes bred out in October 1915, a smaller series having been bred in the previous June.

Mutilla benefactrix, sp. n. (figs. 1, 2).
ㅇ. Nigra; mandibulis, antemnis, thorace, pedibusque rufo-ferrugineis ; segmentodorsali secundo macula magna basali albido-pubescente; segmentis dorsalibus secundo tertioque fascia apicali brunnea, albido-pubescente.
§. Niger ; albo-pilosus; thorace segmentoque mediano ferrugineis; mandibulis antennisque subtus fuscis; alis hyalinis, apice leviter infuscatis; calcaribus albis. Long. ㅇ, $4 \cdot 5.5 \mathrm{~mm}$. ; $\delta^{7}, 4 \cdot 5-5.5 \mathrm{~mm}$.

오. Head as broad as the thorax, closely and decply punctured, rounded at the posterior angles; eyes oval, situated rather nearer to the posterior margin of the head than to the base of the mandibles; antennal tubercles well developed, oblique;
second joint of the flagellum short, equal in length to the third, less than twice as long as the first. Thorax punctured-rugose, distinctly longer than the greatest breadth, a little broader at the apex than at the base; the sides straight, not rounded; pleurae finely punctured; the posterior slope of the thorax abrupt, the surface coarsely longitudinally rugose; scutellar tubercle distinct. Abdomen sessile; the first segment very small and sunk below the level of the second; the second dorsal segment very closely and not finely punctured, longer than the greatest breadth, the sides slightly convex, a large patch of whitish pubescence slightly tinged with fulvous at the base, and a narrow band of the same at the apex of both the second and third dorsal segments. Sixth dorsal segment convex, without a pygidial area.


Fig. 1. Mutilla benefactrix, sp. n., ${ }^{\text {\& }}$.

Carina of the first ventral segment very low ; second ventral segment rather coarsely punctured, and sparsely clothed with long whitish hairs. Hind tibiae with four very slender spines on the outer margin. The sides of the posterior slope of the median segment very finely serrate.
$\widehat{\delta}$. Head as broad as the thorax, finely and very closely punctured, covered with long grevish pubescence, a distinct sulcus rumning from the anterior ocellus to the base of the antennac. Posterior ocelli near together, very little further from each other than from the anterior ocellus; eyes deeply emarginate. Antemal tubereles well developed; third joint of the flagellum as long as the first and second combined.

Thorax closely and rather finely punctured; scutellum flat, rather broadly truneate at the apex. Median segment as long as the scutellum, coarsely punctured-rugose, abruptly truncate, the posterior slope distinctly divided from the dorsal area. Abdomen finely and closely punctured, with a very narrow apical band of white pubescence on the three basal dorsal segments ; the first segment short, and depressed somewhat below the second, which is strongly convex, broader than long, and convex at the sides; seventh dorsal segment subtruncate at the apex. Second ventral segment rather more strongly punctured than the dorsal, sparsely clothed with long white hairs and with a distinct apical fringe of the same. Radial cell not more than twice as long as broad; first abscissa of the radius a little longer than the third,


Fig. 2. Mutilla benefactrix, sp. n., $0^{1}$.
second searcely half as long as the first. Third cubital cell not distinetly defined, receiving the rather indistinct second recurrent nervure near the apex, first recurrent nervure received just beyond the middle of the second cubital cell.

Nyasaland: Monkey Bay, viii. 1915 (Dr. W. A. Lamborm).
Three pairs bred from pupae of Glossina morsitans.
This seems to belong to the group of M. thyone, Pér., but differs in sculpture, in the serculate sides of the posterior slope of the thorax of the female and in other details.

